

REMARKS

The specification and claim 1 have been amended in response to the objections. No new matter has been added, and entry of the Amendment is respectfully requested.

Claims 1-3 and 6-9 are pending, of which claims 6-8 are withdrawn from consideration.

If claim 1 is found to be allowable, Applicants respectfully request rejoinder of withdrawn method claims 6-8 pursuant to MPEP §821.04(b).¹

In response to the Examiner's reiteration of the Restriction Requirement, Applicants affirm their election of Group I, claims 1-3 and 9 for prosecution, without traverse.

The disclosure was objected to because of the following informalities:

(a) The language " R_f^1 is a bivalent alkylene group" should be changed to " R_f^1 is a bivalent fluorinated alkylene group."

(b) The recitation "persulfuric acid" on page 19 at line 14 should be corrected to "persulfuric acid."

As noted, the specification has been amended to correct the informalities. Withdrawal of the objection to the specification is requested.

Claim 1 was objected to because of the following informalities:

The Examiner considered the language "is obtained by reacting a fluorine containing compound having a fluorine containing elastomer segment obtained by polymerizing a fluorine

¹ As provided by MPEP §821.04(b), where restriction was required between a product and a process of making and/or using the product, if Applicant elects a claim(s) directed to a product which is subsequently found allowable, withdrawn process claims which depend from or otherwise requires all the limitations of an allowable product claim should be considered for rejoinder.

containing monomer having a formula (1) as $X^1-R_f^1-C(=O)-OR^1$, with a silicone rubber having at least one amino group” in claim 1 to be confusing and requested appropriate revision.

As noted, claim 1 has been amended to clarify the language. Withdrawal of the objection to claim 1 is requested.

Claims 1-3 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by Heeks et al (U.S. 5,736,250), Konno et al (U.S. 5,141,991), Kojima et al (U.S. 4,314,043) or Eguchi et al (U.S. 4,316,941).

This rejection should be withdrawn because Heeks et al, Konno et al, Kojima et al and Eguchi et al do not disclose or render obvious the present invention.

The presently claimed graft or block polymer is obtained by polymerizing a fluorine-containing monomer in the presence of the compound $X^1-R_f^1-COOR^1$ to prepare the fluorine-containing elastomer segment, and then reacting the fluorine-containing elastomer segment with the amino-containing silicone rubber segment. As a result, the obtained graft or block polymer of the present invention has amide bond $-CONH-$ which is formed by reacting $-COOR^1$ derived from the fluorine-containing elastomer segment and the amino group of the silicone rubber segment.

Heeks et al

As pointed out in the Response to Restriction Requirement filed July 29, 2008, Heeks et al discloses crosslinked elastomers of a latex fluorocarbon elastomer and an aminosiloxane. The latex fluorocarbon elastomer includes a cure site monomer, and Heeks et al exemplifies 4-bromoperfluorobutene-1; 1,1-dihydro-4-bromo-perfluorobutene-1; 3-bromoperfluoropropene-1; 1,1-dihydro-3-bromoperfluoropropene-1 as cure site monomer.

However, Heeks et al has no description as to any cure site monomer having an ester moiety. Therefore, the polymer of Heeks et al does not have an amide bond, and is structurally different from the presently claimed graft or block polymer.

Konno et al

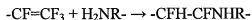
As explained in the Response to Restriction Requirement filed July 29, 2008, Konno et al discloses graft copolymerizing a specific organosilicon compound onto a polyamine-vulcanizable fluororubber. However, Konno et al does not disclose the reactive site of the polyamine-vulcanizable fluororubber. That is, Konno et al does not disclose the presently claimed elastomer segment obtained by polymerizing a fluorine containing monomer with the fluorine containing compound represented by the formula (1) which has an ester moiety.

Consequently, the polymer of Konno et al does not have an amide bond, and is therefore structurally different from the presently claimed graft or block polymer.

Kojima et al

As explained in the Response to Restriction Requirement filed July 29, 2008, Kojima et al discloses a graft copolymer having chemical linkages at the reactive site of fluorine-containing polymeric segments and an organopolysiloxane segment, however, the reactive site defined in the elastomer of the present invention structurally differs from that of Kojima et al in which the reactive site is an epoxy group, an amino group, an organic acid group or a vinyl group.

In Kojima et al, the following reaction scheme is disclosed at column 3, bottom line.



Namely, the obtained polymer does not have a -CONH- bond. Therefore, the polymer of Kojima et al is also structurally different from the presently claimed graft or block polymer.

Eguchi et al

The disclosure of Eguchi et al at col. 2, line 66 to col. 4, line 68, cited by the Examiner, is similar to the corresponding disclosure of Kojima et al. Accordingly, similar to Kojima et al, Eguchi et al's polymer does not have a -CONH- bond. Therefore, the polymer of Eguchi et al is structurally different from the presently claimed graft or block polymer.

Conclusion

As explained above, since the structure of the presently claimed graft or block polymer is different from that of the polymers of the cited references, the present invention defines novel subject matter. Further, there is no teaching or suggestion in the cited references as to preparation of the presently claimed graft or block polymer having a -CONH- bond.

In view of the above, reconsideration and withdrawal of the §102(b) rejection based on Heeks et al, Konno et al, Kojima et al or Eguchi et al are respectfully requested.

Allowance of claims 1-3 and 6-9 is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

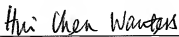
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